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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,128	05/15/2001	Lars Gustaf Liljeryd	0226-0110P	3432

2292 7590 10/29/2004

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EXAMINER

ABEBE, DANIEL DEMELASH

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,128

Applicant(s)

LILJERYD ET AL.

Examiner

Daniel D Abebe

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 12-14, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 11 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/2001; 2/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Preliminary amendment

The preliminary amendment filed on 2/20/2001 is not entered because the amendment is not signed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "grid" in 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10 and 12-14 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Davidson (5,394,473).

As to claim 1, Davidson teaches a low bit spectral coding and decoding, comprising the steps of:

Perform digital analysis on an input signal into segments;

Select time frequency resolution or signal sample block length for each sampled audio segments;

"In accordance with the teachings of the present invention, in a specific embodiment a transient detector adaptively selects signal sample block lengths shorter than the maximum block length normally used by the invention when shorter block lengths are needed to insure psychoacoustic masking of distortion artifacts created by transient signals. The digitized signal samples are passed through a high-pass filter and grouped into subblocks." (Col.Col.11, lines 33-40;

"The invention relates in general to high-quality low bit-rate digital transform coding and decoding of information corresponding to audio signals such as music or voice signals. More particularly, the invention relates to signal analysis/synthesis in coding and decoding. The invention can optimize the trade off in transform coders between time resolution and frequency resolution by adaptively selecting the transform block length for each sampled audio segment, and/or can optimize coding gain by adaptively selecting the transform and/or by adaptively selecting the analysis window or the analysis/synthesis window pair." (Col.1, .lines 12-24).

Generated sets of spectra coefficient (envelope data) for each signal block;
And transmit the data to a decoder where its used to synthesize the speech.
(Col.10, lines 61-70).

As to claim 2, Davison teaches a weighting factor for every group (Fig.19a).

As to claims 3-4, Davidson teaches a filter bank to obtain the time frequency resolution (Fig.1).

As to claims 5-6, Davidson teaches transient detector and linear predictor (Fig.1a-1b).

As to claim 7, according to Davison change in frequency-time resolution is implied through changing the size of the block length using the adaptive window (abstract).

As to claim 10, Davison teaches where the block length vary (Col.4, lines35-45).

As to claims 12-14, Davidson teaches where the data is encoded (Fig.1).

Claim 16 is analogous to claim 1 and is rejected for the foregoing reasons by Davidson.

As to claim 17, the corresponding decoder for synthesizing speech from the data is shown (Fig.1b).

Allowable Subject Matter

Claims 8-9,11 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

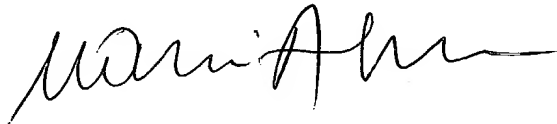
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D Abebe whose telephone number is 703-308-5543. The examiner can normally be reached on monday-friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Abebe, Primary Examiner A.U. 2655

A handwritten signature in black ink, appearing to read 'Daniel Abebe', with a stylized, flowing script.

October 18, 2004